

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Attorney Docket No.: **ISPH-0617**

#5/I.D.S.

Inventors: **Bennett et al.**

Serial No.: **Not Yet Assigned**

Filing Date: **Herewith**

Examiner: **Not Yet Assigned**

Group Art Unit: **Not Yet Assigned**

Title: **Antisense Modulation of SHH Expression**

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Date of Deposit **November 16, 2001**

I hereby certify that this paper is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Assistant Commissioner for Patents, Box PCT, Washington, D.C. 20231.

By Jane Massey Licata
Typed Name: Jane Massey Licata, Reg. No. 32,257

Assistant Commissioner for Patents
Washington, DC 20231

Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 C.F.R. §1.56 and in accordance with 37 C.F.R. §§1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 C.F.R. §1.56(b).

(XX) In accordance with §1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified

application, within three months of the date of entry into the national stage of the above identified application as set forth in §1.491, or before the mailing date of a first Office Action on the merits of the above-identified application, no additional fee is required.

() In accordance with §1.97(c), this Information Disclosure Statement is being filed after the period set forth in §1.97(b) above but before the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.311, therefore:

() Certification in Accordance with §1.97(e) is set forth below; or

() The fee of \$180.00 as set forth in §1.17(p) is attached.

() In accordance with §1.97(d), this Information Disclosure Statement is being filed after the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.311 but before the payment of the Issue Fee, therefore included are: Certification in Accordance with §1.97(e); Petition Requesting Consideration of the Information Disclosure Statement; and the fee of \$130.00 as set forth in §1.17(i)(1).

(xx) Copies of each of the references listed on the attached Form PTO-1449 (modified) are enclosed herewith.

() In accordance with §1.98(d), copies of some or all of the references listed on the attached Form PTO-1449 (modified)

are not enclosed herewith because they were previously submitted to the U.S. Patent and Trademark Office in prior application Serial No. _____, filed _____, for which a claim for priority under 35 U.S.C. §120 has been made in the instant application.

Please charge any deficiency or credit any overpayment to Deposit Account No. 50-1619. This form is submitted in duplicate.

The relevance of the listed references in a foreign language is as stated in the specification at pages @@.

(XX) All listed references are in the English language.

Respectfully submitted,

Jane Massey Licata
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Date: November 16, 2001

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#5

Sheet 01 of 03

Form PTO-1449 Modified		Docket No. ISPH-0617	Serial No. Not Yet Assigned
List of Patents and Publications Cited by Applicant (Use several sheets if necessary)		Applicant Bennett et al.	
U.S. Department of Commerce		Filing Date Herewith	Group Not Yet Assigned

10/001844
11/16/01

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	AA	Grosjean et al., "UV-specific mutations of the human patched gene in basal cell carcinomas from normal individuals and xeroderma pigmentosum patients", <i>Mutation Research</i> 2000 193-199
	AB	Fan et al., "Sonic Hedgehog Opposes Epithelial Cell Cycle Arrest", <i>J. Cell Biol.</i> 1999 147:71-76
	AC	Fujita et al., "Involvement of Sonic hedgehog in the Cell growth of LK-2 Cells, Human Lung Squamous Carcinoma Cells", <i>Biochemical and Biophysical Research Communication</i> 1997 238:658-664
	AD	Helms et al., "Sonic hedgehog Participates in Craniofacial Morphogenesis and Is Down-regulated by Teratogenic Doses of Retinoid Acid", <i>Developmental Biology</i> 1997 187:25-35
	AE	Incardona et al., "The teratogenic Veratrum alkaloid cyclopamine inhibits Sonic hedgehog signal transduction", <i>Development</i> 1998 125:3553-3562
	AF	Mariigo et al., "Cloning, Expression, and Chromosomal Location of SHH and IHH: Two Human Homologues of the Drosophila Segment Polarity Gene Hedgehog", <i>Genomics</i> 1995 28:44-51
	AG	Ming et al., "Human developmental disorders and the Sonic hedgehog pathway", <i>Molecular Medicine Today</i> 1998 343-349
	AH	Oro et al., "Basal Cell Carcinomas in Mice Overexpressing Sonic Hedgehog", <i>Science</i> 1997 276:817-821
	AI	Roux et al., "Role of cholesterol in embryonic development ¹⁻⁴ ", <i>Am J Clin Nutr</i> 2000 71:1270S-1279S

EXAMINER	DATE CONSIDERED
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Form PTO-1449 Modified		Docket No. ISPH-0517	Serial No. Not Yet Assigned
List of Patents and Publications Cited by Applicant (Use several sheets if necessary)		Applicant Bennett et al.	
U.S. Department of Commerce		Filing Date Herewith	Group Not Yet Assigned

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	AJ	Villavicencio et al., "The Sonic Hedgehog-Patched-Gli Pathway in Human Development and Disease", <i>Am. J. Hum. Genet.</i> 2000 67:1047-1054

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U. S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

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